



SUBMISSION FORM

All submission forms must include the following information. Separate submission forms must be turned in for each eligible program. **Deadline: July 1, 2025.** Please include this submission form as the first page of your electronic entry. If you do not receive an email confirming receipt of your entry within 3 days of submission, please contact [Gage Harter](#).

PROGRAM INFORMATION

County: Orange County
Program Title: Address Point Collection Workflow Advancements
Program Category: Technology

CONTACT INFORMATION

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SIGNATURE OF COUNTY ADMINISTRATOR OR DEPUTY/ASSISTANT COUNTY ADMINISTRATOR

Name: Stephanie Straub
Title: Assistant County Administrator
Signature: *Stephanie Straub*

**2025 VACo Achievement Award Nomination; Category: Technology
Nominee: Address Point Collection Workflow Advancements****Brief Description:**

The Geographic Information Systems (GIS) division of our Information Technology Department helps set Orange County apart thanks to its innovative nature and its programs and activities that regularly, and boldly, go beyond such departments' typical responsibilities. Over the last year it has engaged in multiple efforts that use the connection of place and data to tell more compelling (and sometimes fun) stories. Examples include partnering with Parks & Recreation to map a holiday lights tour of Orange County, working with our Opioid Response Program to create a resource directory, and coordinating hazardous waste response resources with our Fire & EMS department.

However, the backbone of a successful organization is efficient processing, and our GIS team has diligently worked to refine their task workflow for the benefit of their division, department, partner agencies, and ultimately, our residents. Of particular note are last year's efforts to systematically remove unnecessary steps during the 911 addressing process. When the Trimble units used for this function started to age and break, staff seized the opportunity to save costs and time by establishing a new process that bypassed the need for any additional hardware or software rather than "just doing what we've always done" and paying for new units. As a result, our GIS personnel have realized cost savings of at least \$18,000 in tools and reduced processing by at least 15 minutes per address. Given that approximately 450 addresses are processed per year, this reflects an astounding time savings of nearly three weeks annually!

Full Description:

While programs and forward-facing initiatives often receive more attention and notoriety, effective processes provide the foundation that allows other efforts to flourish. Our GIS team has made great strides in both areas, often collaborating with other departments to devise new ways of utilizing maps to tell a more complete story or provide more useful resources.

Similarly, the act of collecting address points to populate Orange County databases and systems, although spearheaded by GIS, was a collaborative effort involving multiple departments. Previously, the process would involve a Building Inspections staff member visiting the parcel in question after a construction application had been received.



Figure 1: An example of the Trimble units previously used for field data collection.

Using a specialized Trimble device, the employee would mark the location where the proposed driveway would meet the road, then walk the approximate path to the location where the new structure would be built. The Trimble would record the data and (ideally) upload it for later use. Reliably sending the data required that vehicles used for this purpose be equipped with Wi-Fi access point capability, which itself was a considerable cost. Data was stored by the vendor at a subscription cost of \$3,700 annually. At this stage, the procedure had just begun. GIS staff still had to manually find the field-collected data on the vendor's site, then download it, store it, and process it into the enterprise database with the proper naming conventions on the correct location to assign a new 911 address. Critical Orange County systems, such as our 911 Computer-Aided Dispatch system and our Planning & Zoning Permit and

Application platform, among others, pull source information from this database depending on their particular needs. Given the nature of these systems, it was very important that the process be handled efficiently and with a high degree of precision.

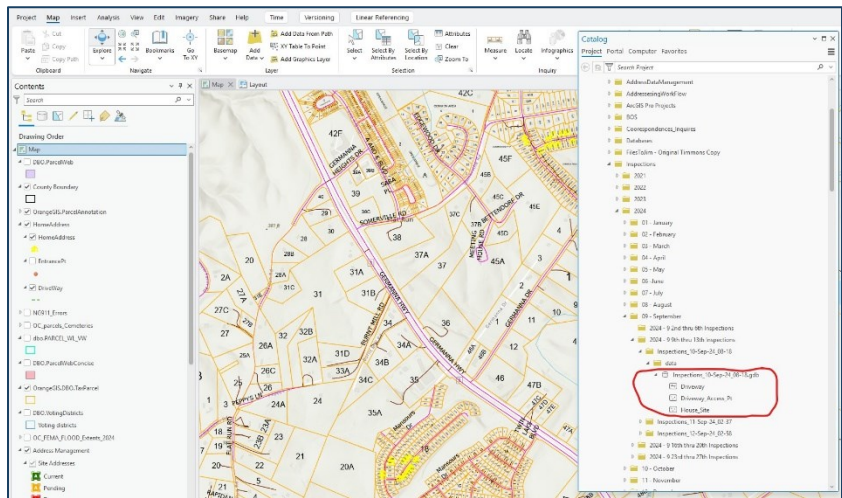


Figure 2: This screenshot demonstrates the old process, in which each piece of information would have to be downloaded then correlated in the enterprise system through manual means.

Admittedly, the old process was very accurate, but it involved a significant number of unnecessary steps that hampered functions across several departments. Not counting collection, each address required a processing time of 15-30 minutes. With approximately 450 addresses processed each year, GIS staff were focused on this task for a total of three to six weeks annually!

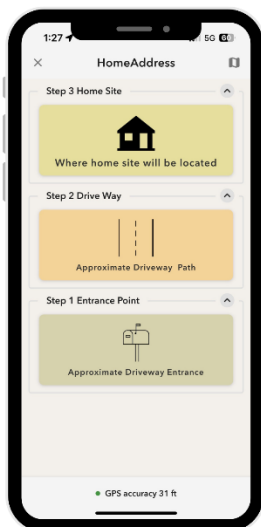


Figure 3: Staff utilized already-available tools to develop a new process that allows elegantly simple field data collection on a standard smartphone.

The opportunity for improvement came about when one of the Trimble units broke and would have needed replacement at a cost of \$5,000. Worse, age was impacting even the functioning units. Recognizing that it was not worthwhile to 'patch' an inefficient process, GIS staff looked at their toolkit of already-extant resources for a solution. The new process was developed in-house using Orange County's ArcGIS solution. Rather than Trimble units, Building Inspections staff and any other field users now use the Quick Capture application, which works with any Orange County-

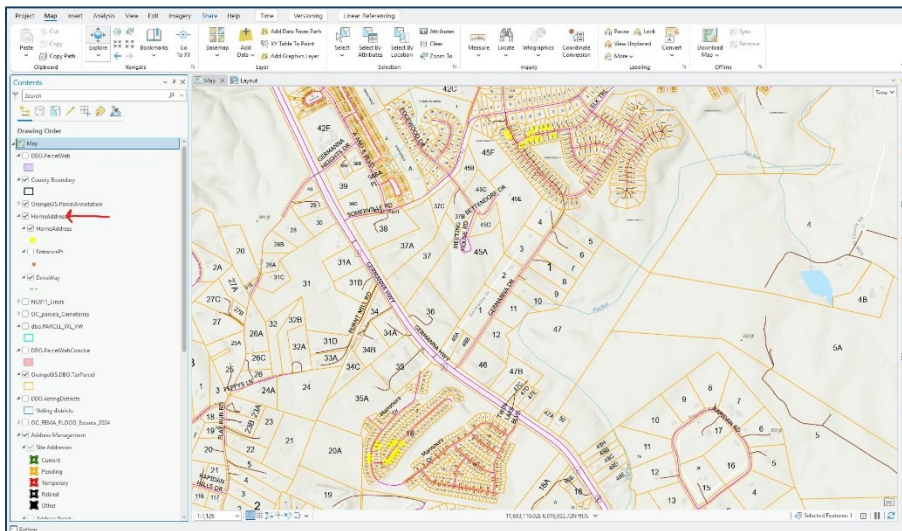


Figure 4: This screenshot showcases the new process. Collected information is already readily available on the map automatically. Staff can simply toggle the information on to display it.

issued smartphone, to record the needed locations in the field. Rather than landing in a vendor-operated site to await processing, the datapoints are uploaded directly to the County's GIS

enterprise database. All that's required to access the platform is the County login they already have and a few permissions granted by GIS. Once uploaded, GIS personnel must still assign the address based on the proper naming conventions, but the time required is exponentially reduced because the data is already prepared for them in the right 'cyber' space. It's ready and waiting on the map. From there, it's just four clicks and a small bit of typing to complete the address point assignment. Furthermore, queries and reports are much more straightforward with the new system, which has additional beneficial effects on other processes.

Beyond the reduction in staff time and improvements directly related to GIS, this process improvement has made waves among partner departments. Having multiple involved parties could easily have presented a challenge, since they had already built SOPs around the former hardware and software tools (such as the aforementioned Wi-Fi-enabled vehicles). However, GIS was able to demonstrate to other involved departments that this transition was 'low-hanging fruit' that could have positive impacts that far outweighed any growing pains associated with the change. Whereas before the

building inspector would need Wi-Fi access to upload collected information, this approach safely stores the GPS data until a strong enough cellular data connection is reached. Once achieved, the data is automatically uploaded to the GIS system. Departments whose missions are supported by our enterprise database, such as Development Services and E-911 Communications, strongly benefit from the reduction in time required to process addresses. In the case of 911, this can even have impacts on emergency response, where accuracy and speed are of the utmost importance.

Too often, inefficient or expensive processes are allowed to continue because overcoming the transitional hurdles seems more troublesome than the issue itself. To quote the old adage, “The cure is worse than the disease,” or at least it seems to be so. In this case, our GIS team leveraged the innovation they’ve regularly demonstrated externally to overcome any such obstacles and improve operations internally. The result is a significant direct savings in equipment and subscription costs and a far more valuable savings in time and indirect costs. Looking forward, they plan to build on this success with further efficiency refinements, such as email alerts regarding new field data collection. Since staff intentionally utilized tools and platforms that were already available to them, and which are widely available across the industry, they believe their solution could be implemented in other localities. They would be happy to discuss their efforts with other interested counties, cities, or towns.